

WHAT IS CLAIMED IS:

1. A process for producing a glass for cathode ray tubes, having a  $\text{Sb}_2\text{O}_3$  content of from 0 to 0.19% as represented by mass percentage and containing  $\text{H}_2\text{O}$ , which
- 5 process comprises a step of melting a raw material in an atmosphere under a pressure of  $P_0$  to obtain a molten glass, and a step of vacuum degassing the molten glass in an atmosphere under a pressure  $P_A$  which is lower than  $P_0$ , wherein the pressure  $P$  of the molten glass is made to be
- 10 at most  $(6.1W+0.06)$  atm in the vacuum degassing step, wherein  $W$  is the content of said  $\text{H}_2\text{O}$  as represented by mass percentage.
2. The process for producing a glass for cathode ray tubes according to Claim 1, wherein the period of time
- 15 during which the pressure  $P$  of the molten glass is made to be at most  $(6.1W+0.06)$  atm, is at least 0.1 hour.
3. The process for producing a glass for cathode ray tubes according to Claim 1, wherein  $P_0$  is from 0.8 to 1.2 atm.
- 20 4. The process for producing a glass for cathode ray tubes according to Claim 1, wherein  $W$  as represented by mass percentage, is from 0.005 to 0.05%.
5. The process for producing a glass for cathode ray tubes according to Claim 1, wherein the glass for cathode
- 25 ray tubes consists essentially of, as represented by mass percentage based on the following oxides:

$\text{SiO}_2$  45 to 70%,

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	$\text{Al}_2\text{O}_3$	0 to 10%,
	$\text{Na}_2\text{O}$	1 to 15%,
	$\text{K}_2\text{O}$	3 to 15%,
	$\text{MgO}$	0 to 10%,
5	$\text{CaO}$	0 to 10%,
	$\text{SrO}$	0 to 13%,
	$\text{BaO}$	0 to 16%,
	$\text{ZnO}$	0 to 5%,
	$\text{ZrO}_2$	0 to 5%,
10	$\text{TiO}_2$	0 to 2%,
	$\text{CeO}_2$	0 to 5%,
	$\text{B}_2\text{O}_3$	0 to 5%,
	$\text{Sb}_2\text{O}_3$	0 to 0.19%,
	$\text{H}_2\text{O}$	0.005 to 0.05%,
15	$\text{SnO}_2$	0 to 5%, and
	$\text{SO}_3$	0 to 0.4%.

6. The process for producing a glass for cathode ray tubes according to Claim 1, wherein the  $\text{Sb}_2\text{O}_3$  content as represented by mass percentage in the glass for cathode ray tubes, is from 0 to 0.029%.

7. The process for producing a glass for cathode ray tubes according to Claim 1, wherein the glass for cathode ray tubes contains no  $\text{SnO}_2$ .

8. The process for producing a glass for cathode ray tubes according to Claim 1, wherein the glass for cathode ray tubes contains  $\text{SO}_3$ , and its content as represented by mass percentage is from 0.05 to 0.4%.

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